Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the captioned application:

Listing of Claims:

1. Canceled.
2. Canceled.
3. Canceled.
4. Canceled.
5. Canceled.
6. Canceled.
7. Canceled.
8. Canceled.
9. Canceled.
10. Canceled.
11. Canceled.
12. Canceled.
13. Canceled.
14. Canceled.
15. Canceled.
16. Canceled.
17. Canceled.
18. Canceled.

Please add claims 19-52 as follows:

19. (New) A compound that binds to a thrombopoietin receptor, wherein said compound comprises

$$X_9\ X_8\ G\ X_1\ X_2\ X_3\ X_4\ X_5\ X_6\ X_7$$

where X_1 is P; X_2 is T; X_3 is L; X_4 is R; X_5 is Q; X_6 is selected from the group consisting of W (Trp), L-Trp, D-Trp, L-1-Nal, D-1-Nal, L-2-Nal, D-2-Nal, L-(Benzothienyl)-alanine, DL-5-Me-Trp, DL-1-Me-Trp, DL-6-F-Trp, DL-5-F-Trp, DL-5-Br-Trp and L-Tic; X_7 is L; X_8 is E; X_9 is I.

20. (New) The compound of claim 19, wherein said compound is covalently attached to a polymer.

21. (New) The compound of claim 20, wherein said polymer has an average molecular weight of between about 500 to about 40,000 daltons.

22. (New) The compound of claim 20, wherein said polymer has an average molecular weight of between about 5,000 to about 20,000 daltons.

23. (New) The compound of claim 20, wherein said polymer has an average molecular weight of about 20,000 daltons.

24. (New) The compound of claim 20, wherein said polymer is selected from the group consisting of polyethylene glycol, polypropylene glycol, polylactic acid and poly glycolic acid.

25. (New) The compound of claim 23, wherein said compound is covalently attached to polyethylene glycol.

26. (New) The compound of claim 25, wherein said polyethylene glycol has an average molecular weight of about 20,000 daltons.

27. (New) A pharmaceutical composition comprising a compound of claim 26 in combination with a pharmaceutically acceptable carrier.

28. (New) A method for treating a patient suffering from a disorder that is susceptible to treatment with a thrombopoietin agonist, comprising administering to the patient a therapeutically effective dose or amount of a compound of claim 26.

29. (New) A method of activating a thrombopoietin receptor in a cell, comprising contacting said cell with an effective amount of a compound which comprises:

$$X_9\ X_8\ G\ X_1\ X_2\ X_3\ X_4\ X_5\ X_6\ X_7$$

where X_1 is P; X_2 is T; X_3 is L; X_4 is R; X_5 is Q; X_6 is selected from the group consisting of W (Trp), L-Trp, D-Trp, L-1-Nal, D-1-Nal, L-2-Nal, D-2-Nal, L-(Benzothienyl)-alanine, DL-5-Me-Trp, DL-1-Me-Trp, DL-6-F-Trp, DL-5-F-Trp, DL-5-Br-Trp and L-Tic; X_7 is L; X_8 is E; X_9 is I.

30. (New) A method according to claim 29 wherein said cells comprise human megakaryocytes, platelets or CD34+ cells.

31. (New) A method according to claim 29 wherein said cells comprise TPO-dependent cells.

32. (New) A method of treating thrombocytopenia in a subject, comprising: (a) obtaining a population of said subject's cells comprising megakaryocyte precursor cells; (b) treating said cells according to the method of claim 29; and (c) administering said treated cells to said subject, to increase the number of megakaryocytes present in said subject compared to that which would occur without such treatment.

33. (New) A method according to claim 32 wherein said thrombocytopenia is due to chemotherapy.

34. (New) A method according to claim 32 where said population of cells is obtained prior to chemotherapy.

35. (New) A method according to claim 32 wherein said thrombocytopenia is due to radiation therapy.

36. (New) A method according to claim 35 where said population of cells is obtained prior to said radiation therapy.

37. (New) A method of treating a patient suffering from thrombocytopenia, comprising administering to said patient a therapeutically effective dose of a compound which comprises:

$$X_9\ X_8\ G\ X_1\ X_2\ X_3\ X_4\ X_5\ X_6\ X_7$$

where X_1 is P; X_2 is T; X_3 is L; X_4 is R; X_5 is Q; X_6 is selected from the group consisting of W (Trp), L-Trp, D-Trp, L-1-Nal, D-1-Nal, L-2-Nal, D-2-Nal, L-(Benzothienyl)-alanine, DL-5-Me-Trp, DL-1-Me-Trp, DL-6-F-Trp, DL-5-F-Trp, DL-5-Br-Trp and L-Tic; X_7 is L; X_8 is E; X_9 is I.

38. (New) A method according to claim 37 wherein said thrombocytopenia is due to chemotherapy or radiation therapy.

39. (New) A method according to claim 37 wherein a TPO antagonist is administered to said patient prior to said chemotherapy or radiation therapy.

40. (New) A method according to claim 37 wherein said thrombocytopenia is due to bone marrow transfusion.

41. (New) A method of prophylactically treating a patient at risk of thrombocytopenia, comprising administering to said patient a prophylactically effective amount of a compound:

$$X_9\ X_8\ G\ X_1\ X_2\ X_3\ X_4\ X_5\ X_6\ X_7$$

where X_1 is P; X_2 is T; X_3 is L; X_4 is R; X_5 is Q; X_6 is selected from the group consisting of W (Trp), L-Trp, D-Trp, L-1-Nal, D-1-Nal, L-2-Nal, D-2-Nal, L-(Benzothienyl)-alanine, DL-5-Me-Trp, DL-1-Me-Trp, DL-6-F-Trp, DL-5-F-Trp, DL-5-Br-Trp and L-Tic; X_7 is L; X_8 is E; I_9 is I.

42. (New) A method according to claim 41 where said compound is administered prior to bone marrow transplantation, chemotherapy or radiation therapy.

43. (New) A compound that binds to thrombopoietin receptor, said compound having: (i) a molecular weight of less than about 8000 daltons, and (ii) a binding affinity to thrombopoietin receptor as expressed by an IC_{50} of no more than about 100 μM, wherein said compound comprises the following sequence of amino acids:

$$X_9\ X_8\ G\ X_1\ X_2\ X_3\ X_4\ X_5\ X_6\ X_7$$

where X_1 is P; X_2 is T; X_3 is L; X_4 is R; X_5 is Q; X_6 is selected from the group consisting of W (Trp), L-Trp, D-Trp, L-1-Nal, D-1-Nal, L-2-Nal, D-2-Nal, L-(Benzothienyl)-alanine, DL-5-Me-Trp, DL-1-Me-Trp, DL-6-F-Trp, DL-5-F-Trp, DL-5-Br-Trp and L-Tic; X_7 is L; X_8 is E; I_9 is I.

44. (New) The compound of claim 43, wherein said sequence of amino acids is cyclized.

45. (New) The compound of claim 43, wherein said sequence of amino acids is dimerized.

46. (New) The compound of claim 45, wherein each of the dimeric subunits of said compound is covalently attached to a polymer.

47. (New) The compound of claim 46, wherein said polymer has an average molecular weight of between about 500 to about 40,000 daltons.

48. (New) The compound of claim 46, wherein said polymer has an average molecular weight of between about 5,000 to about 20,000 daltons.

49. (New) The compound of claim 46, wherein said polymer is selected from the group consisting of polyethylene glycol, polypropylene glycol, polylactic acid and poly glycolic acid.

50. (New) The compound of claim 49, wherein each of the dimeric subunits of said compound is covalently attached to polyethylene glycol.

51. (New) The compound of claim 50, wherein said polyethlyene glycol has a molecular weight of about 20,000 daltons.

52. (New) A pharmaceutical composition comprising a compound of claim 51 in combination with a pharmaceutically acceptable carrier.